

said cavity mold being accessible by said stationary portion and said movable mold portion;

a first molten resin flow path extending from inside said screw cylinder to a terminal end of said hollow; and,

an adjustable pressure relief valve to accommodate a change in molten resin material and a corresponding change in molding cavity pressure, said adjustable pressure relief valve being located on said mold parting line in an engaged state relative to said first molten resin flow path at said terminal end of said hollow and adapted to release said molten resin from said first molten resin flow path into a second molten resin flow path when pressure of said molten resin in said first molten resin flow path exceeds a predetermined value.

4. (Twice Amended) The apparatus recited in claim 1 wherein said adjustable pressure relief valve comprises a movable pin actuated by a spring bias, said movable pin being adapted for movement between a first position that blocks said molten resin when said pressure is less than said predetermined value; and, to a second position that releases said molten resin in said first molten resin flow path into a second molten resin flow path in fluid communications with said first molten resin flow path thereby relieving pressure in said first molten resin flow path.

8. (Amended) The apparatus recited in claim 4 wherein said adjustable pressure relief valve is adjustable to said predetermined value by adjusting a threaded screw supporting said spring bias biasing said movable pin.

9. (Amended) The apparatus recited in claim 4 wherein said adjustable pressure relief valve is adjustable by changing said spring bias.

10. (Amended) The apparatus recited in 1 wherein said adjustable pressure relief valve is adapted to automatically reset after said pressure in said first molten resin flow path falls below said predetermined value.